



STATE OF WASHINGTON

DEPARTMENT OF AGRICULTURE

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Derek Rockett, Program Lead
Washington State Department of Ecology
Water Quality Program
P.O. Box 47775
Olympia, WA 98504-7775

Dear Mr. Rockett,

The Washington State Department of Agriculture (WSDA) has completed our review of the Washington State Department of Ecology's (Ecology) "*Supplemental Environmental Impact Statement for Control of Burrowing Shrimp using Imidacloprid on Commercial Oyster and Clam Beds in Willapa Bay and Grays Harbor, Washington – Draft*" (DSEIS). I am writing to you on behalf of WSDA in response to your request for comments regarding the DSEIS. We feel that the DSEIS was well written and informative and we appreciate your efforts to provide a scientific perspective on the four proposed alternatives.

During our review we identified a specific area of the DSEIS where we recommend additional discussion. The DSEIS references the Marine Sediment Quality Standards (WAC 173-204-320) but does not identify how Ecology would implement the sediment management standards if a new NPDES permit and sediment impact zones (SIZ) were issued. Although monitoring requirements were implemented under the previous NPDES permit to determine if applications of imidacloprid on shellfish beds would comply with the criteria for benthic abundance, the results were inconclusive. Regarding the results from the most recent monitoring studies conducted in 2014 the DSEIS specifically states that, "... as in previous years, variability in benthic abundance collections was high and statistical power was weak" (Department of Ecology DSEIS - Appendix A, Page A-22). Because there is an extremely high degree of variability inherent in the intertidal systems of Willapa Bay and Grays Harbor it is not practical to require the shellfish growers to produce additional monitoring studies that may lack the adequate level of confidence required to determine whether changes in benthic abundance are caused by applications of imidacloprid.

Ecology has also, in the past, required sediment pore water be collected and analyzed. Unfortunately, imidacloprid concentrations in sediment pore water are not an appropriate estimate of toxicity due to the lack of relevant laboratory toxicity studies that would directly associate concentrations of imidacloprid in sediment pore water to invertebrate survival following EPA standardized guidelines. Similarly, comparing concentrations of imidacloprid in sediment pore water to toxicity data derived from laboratory toxicity studies conducted with free swimming invertebrate species in surface water may only provide an indirect and potentially inaccurate estimate of toxicity.

The previous data sets, including the 2014 field trials, were unable to clearly identify a causal relationship between imidacloprid applications and benthic diversity and abundance. Identifying an improved set of monitoring requirements under Alternatives 3 or 4, for example, would allow crucial applications of imidacloprid to occur under the permit while protecting non-target benthic fauna. In the final SEIS please identify standardized monitoring procedures that would be reliable enough to effectively meet the permittees need for regulatory certainty while at the same time generate repeatable and unambiguous data sets so that Ecology can confirm that the assessment needs are satisfied under WAC 173-204-320. Allowing a dual process to proceed under Alternative 3 or 4 will allow imidacloprid applications to move forward while collecting high-quality data sets that would inform both future NPDES permits for imidacloprid as well as federal imidacloprid registrations for estuarine and marine uses.

Please also discuss how and why the decision tree that was used in the previous NPDES permit was developed. In 2014, monitoring was conducted 14 days after applications with imidacloprid. Please discuss why 14 days was specifically selected. Please also outline a timetable for issuing a draft permit and SIZ once a preferred alternative is selected and the final SEIS is released to the public. The addition of this information once incorporated into a final SEIS will help further insure that the requirements of the NPDES permit and SIZs are transparent, reproducible, and do not cause unnecessary economic hardship for the permit applicants.

The DSEIS also specifically mentions conversion of "...ecologically diverse oyster or clam beds into less diverse mudflats containing predominantly burrowing shrimp" (Department of Ecology DSEIS, Page 2-7). Possible conversion from an ecologically diverse community to a less diverse community is of significant concern. In the final SEIS please describe in detail how mudflats containing burrowing shrimp are less diverse than oyster and clam beds. Please provide any relevant data sources and references that may be helpful in understanding how these two ecological communities differ and which one might be considered more desirable from an ecological perspective.

Thank you for providing the opportunity to review the DSEIS and provide our comments. As the delegated state lead agency regarding the use of pesticides use in Washington State, WSDA will continue to offer technical assistance and expertise to Ecology in the development of the NPDES permit and the SIZs. Please feel free to call me at (360) 902-2066 or email me at George.Tuttle@agr.wa.gov if you have any questions and I would be happy to talk with you.

Appreciatively,



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